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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,020	01/12/2005	Kazuhide Mizutani	DK-US030061	9469
22919	7590	01/26/2011		
GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700 WASHINGTON, DC 20036-2680			EXAMINER ALI, MOHAMMAD M	
			ART UNIT	PAPER NUMBER
			3784	
			MAIL DATE	DELIVERY MODE
			01/26/2011	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/521,020	<b>Applicant(s)</b> MIZUTANI ET AL.	
	<b>Examiner</b> MOHAMMAD ALI	<b>Art Unit</b> 3784	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-7, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-7, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/04/10, 01/12/05, 10/11/07 &amp; 09/02/08</u> .             | 6) <input type="checkbox"/> Other: _____                          |

Claims 5-7, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unezaki et al (JP 2002-357377A) in view of Taira (US 7,003,980) .

Unezake et al disclose an air conditioning system and method comprising existing refrigerant piping (4, 6) that was an existing air conditioner (See Fig 12) and contains residue of an existing of an refrigerant oil, a heat source unit (11, 28) and an user unit (23 evaporator/interior unit Fig. 12) that are connected together by the existing refrigerant piping (4, 6) with a replace working refrigerant disposed therein; and an oil collecting device (9) that is configured such that after the existing refrigerant oil has been changed and before the refurbished air conditioner is run in a normal operating mode, the oil collecting device (9) can draw in the replaced working refrigerant that is being circulated through the air conditioner and separate the existing refrigerant oil that is carried with the replaced working refrigerant, the replaced working refrigerant being an HFC refrigerant at least wt% of 32 See Figs. 12, 13, 22-23, 25 and 27 and the translation. See also Para [0027] of machine translation. Unezaki et al disclose the invention substantially as claimed as stated above except Regarding R32 with at least 40 % without R134a is a well known refrigerant in the market. Taira teaches the use of R23 refrigerant mixed with R125 in varying % ranging from 40/60% to 100/0 % mixed refrigerant for the purpose of having a high COP energy efficiency refrigerant. See Fig. 5, column 7, lines 58-65. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the air conditioner of Unezaki in view of Taira such that a refrigerant with mixture of R32 and R125 with at

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least 40 weight % of R 32 could be provided in order to achieve the benefit of achieving a high COP energy efficient refrigerant.

Regarding claims 7 and 11, the above combined disclosure of Unezake et al and Taira disclose the limitations of claims 7 and 11.

Regarding claims 5 and 6, Unezaki et al disclose that changing over a refrigerant circuit being composed of the existing refrigerant piping (4, 6) with the new heat source and the new use user unit (see Para[0051] to normal operation step which has the oil collecting device (as taught by (numeral 9) attached thereto. Regarding fifth step, it is an obvious choice of an individual skilled in the art to perform a required operation in a specific step or other than a specific step since the main objective to wash out and replace the existing mineral non-friendly environmental refrigerant oil by an energy efficient and environmentally friendly and since there is no criticality or unexpected result from it.

Regarding claim 12, Unezaki et al disclose that a wet state through the existing refrigerant line because when running the refrigerant cycle during washing cycle the refrigerant including refrigerant oils pass through the pipes and become wet.

### ***Response to Arguments***

Applicant's arguments with respect to claims 5-7, 11 and 12 have been considered but are moot in view of the new ground(s) of rejection as explained above.

The Examiner believes that the above action contains the justified answer to the arguments of justification of using a mixture of R32 and R125 with at least 40 weight %

of R32 and using the new replaced unit by replacing the temporary washing station 11 as discussed in means for solution on page 2 and Para [0051] of page 10 of the translation to Unezaki Patent.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD ALI whose telephone number is (571)272-4806. The Examiner can normally be reached on Monday through Thursday from 8.30 am to 12 Noon and from 1 pm to 5.30 pm and on Friday from 6 am to 11.30 am and from 2.30 pm to 5 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jules Frantz can be reached on 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MOHAMMAD ALI/

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